FIRST RECORD OF *POMADASYS INCISUS* (HAEMULIDAE) IN THE NORTHERN TYRRHENIAN SEA.

Fabrizio SERENA and **Roberto SILVESTRI**, Centro Regionale di Idrobiologia e Pesca - ARPAT, Via dell'Ambrogiana 2, 57100 Livorno, ITALIA.

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In date 17th September 1992, one individual of *Pomadasys incisus* has been caught off the Tuscanian coasts 5 nautical miles south of Arno River mouth, on soft bottom included in the so-called "muddy sands in sheltered areas" biocenosis (Doménec Ros *et al.*, 1985) and about 8 m depth. The individual has been fished early in the morning with a 43 mm mesh size trammel-net.

In the Mediterranean Sea *Pomadasys* Lacepède, 1802 (valid Ben-Tuvia and McKay in Whitehead *et al.*, 1986) is represented by two species: *P. incisus* (Bowdich, 1825) and *P. stridens* (Forsskål, 1775). The last species has been signalized for the first time in the Ligurian Sea by Torchio (1969) as an "exotic species of Indopacific origin".

There is an abundant literature regarding *P. incisus*. The species has been described with different names by several researchers since the XIXth Century. Recently, *Pomadasys* has been reviewed by Roux in Quéro *et al.* (1990).

P. incisus and *P. stridens* are the only two Mediterranean species of the Haemulidae while this family is well represented with several species in the tropical Eastern Atlantic (Ben-Tuvia and McKay in Whitehead *et al.*, 1986). In fact, at the present, the Mediterranean fauna is characterized by the presence of Atlanto-Mediterranean species settled since the Pleocene passing through the Gibraltar Strait (Bombace, 1990). The Atlantic origin of about 56% of the species living actually in Mediterranean Sea has been demonstrated and for some endemic species it is stated that they are closely related with Atlantic fauna (Fredj and Maurin, 1987).

The Percoid *Pomadasys incisus* is widely distributed along the Eastern-Atlantic coast of Europe and Africa from 36° N to 20° S including the Madeira and Canarias archipelagos (Fowler, 1936; Poll, 1954). The first record of the species for Mediterranean waters - in Algerian waters - is the paper by Guichenot (1850) and for European coasts (Sète, France) the paper by Carus (1893). In both cases it is considered as a rare species. However, later on, Lozano Rey (1952) considers the species quite common in Malaga (Spain). In the Gulf of Tunisia this species is abundant and its reproductive period is between July and August (Chakroun-Marzouk and Ktari, 1995). Recently *P. incisus* has been recorded for the Ionian Greek coasts (Kaspiris, 1970), and by Bauchot (in Fischer *et al.*, 1987) a chart which the current knowledge regarding its geographical distribution in the Mediterranean is presented.

In Kaspiris paper there are some morphobiometric data which are in agreement with Genova Museum material proceeding from North African samples. More than 20 years after this finding the species has been found also in the Western Italian coasts. It is hypothesized that this finding will be more frequent in the future. The recent finding of this species in the Ligurian Sea (Gavagnin *et al.*, 1994) should confirm this assumption. It seems that there is a downward trend relative to the species abundance from Gibraltar (Alboran Sea) to the Eastern Mediterranean.

The observed individual total length is 219 mm, it is conserved in the C.R.I.P. collection. The specimen is a female in advanced sexual maturative stage. Stomach content was composed of 6 individuals of a Decapod Crustacean *Upogebia pusilla* (Callianassidae), and an unidentified Polychaeta. The presence in the stomach of a subfossil shell of the Lamellibranchia mollusc *Spisula subtruncata* has to be considered accidental. The intestinal portion showed semi-digested remains of crustaceans, probably *Upogebia*, an unidentified bony-fish with ctenoid scales, and rests of Amphipods and Polychaeta bristles.

The main meristic and morphometric characteristics, following Cailliet *et al.* (1986) are given in tables I and II. These observations have been compared when possible with those of Kaspiris (1970). The comparison shows a good agreement regarding the characteristics of the Tyrrhenian and Ionian individuals with the only exception of the relative pectoral fin length. In this case, the described individual shows a difference of about 21% in the pectoral fin/standard length index compared with the Greek individuals while the former is in agreement with the Tortonese original drawing (1975, Vol. XI p. 38) re-

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Table I. - Morphometric data of *Pomadasys incisus* from Livorno, Italy.

Measurements (mm)	Present work	% SL	Kaspiris, 1970	% SL
Standard length	182	100.00	151	100.00
Body depth	66	36.26	51	33.77
Caudal-peduncle depth	19	10.44	15	9.93
Caudal-peduncle length	17	9.34		
Predorsal length	71	39.01		
Length of dorsal base	88	48.35		
Length of anal base	32	17.58		
Length of dorsal fin	28	15.38		
Length of anal fin	26	14.29		
Length of pectoral fin	53	29.12	12	7.95
Length of pelvic fin	34	18.68		
Length of longest dorsal spine	25	13.74		
Length of longest anal spine	22	12.09		
Head length	61	33.52	48	31.79
Head width	30	16.48		
Snout length	15	8.24		
Suborbital width	12	6.59		
Upper-jaw length	15	8.24		
Gape width	29	15.93		
Eye diameter	16	8.79	12	7.95
Preorbital length	19	10.44	15	9.93
Postorbital length	29	15.93	23	15.23

Table II. - Meristic data of *Pomadasys incisus* from Livorno, Italy.

Counts	Present work	Kaspiris, 1970
Dorsal-fin spines	12	12
Dorsal soft rays	16	16
Anal spines	3	3
Anal soft rays	13	12
Total pectoral rays	17	
Scales along lateral line	56	53
Scales above lateral line	8	
Scales below lateral line	11	
Scales before dorsal fin	49	
Scales aroud caudal peduncle	18	
Branchiostegal rays	6	
Total gill rakers on first arch	21	
Gill rakers on lower limb (arm) of the first arch	14	12
Total vertebrae	(16+9)	

ported in the Kaspiris (1970) paper. In fact, in the Tortonese drawing, the pectoral fin length represents about 1/4 of the standard length. It is hypothesized that the difference detected on this index regarding Thyrrenian and Ionian individuals should be due to a typographic error in the Kaspiris paper. For vertebrae counting, the images have been computer-processed by means of the overlapping of a positive and negative scannerized x-ray radiographs. The resulting image evidenciated 16 and 9 precaudal and caudal vertebrae respectively.

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